TRANSACTIONS OF THE NEW YORK SURGICAL SOCIETY.

Stated Meeting, October 10, 1894.

The President, ROBERT ABBE, M.D., in the Chair.

STRICTURE OF THE ŒSOPHAGUS SUCCESSFULLY DIVIDED WITH A STRING (ABBE'S METHOD) AFTER GASTROSTOMY.

DR. F. W. MURRAY presented a child, two years of age, which had entered St. Luke's Hospital in February, 1894, with a stricture of the œsophagus caused by swallowing a quantity of caustic potash a year before. When first seen the boy was in pretty fair condition, was able to take a small quantity of milk by swallowing slowly, but any rapidity was promptly followed by regurgitation. But all attempts to pass even the finest filiform bougie through the œsophagus into the stomach failed, the point of obstruction being seven inches from the incisors. During the next few weeks his condition remained unchanged, excepting the occurrence of vomiting at times. During this period several attempts—some of them under ether—were made to pass bougies to the stomach, but they were always unsuccessful. The later attempts were followed by inability to swallow for a day or two, and nutrient enemata were resorted to. As the patient was gradually losing strength, and it was evident that the stricture was impassable, operation by the "string" method of Dr. Abbe was decided on. On April 23, under ether, through an incision along the left costal cartilages, the stomach was exposed, opened, and united to the skin by silk sutures. Upon the left forefinger as a guide a small rubber bougie was readily introduced into the œsophagus from below and passed upward for three inches, when it was arrested. Smaller-sized instruments and also a number of filiform bougies were introduced with the same result. After trying in vain for twenty minutes to get

past the obstruction, it was decided to desist as the child was growing weak.

The stomach was then sutured by a continuous suture to parietal peritoneum and skin, a rubber catheter left in the wound, sterilized dressing. The child reacted well from the operation and was fed through the tube and per rectum for several days, thus giving the œsophagus an entire rest. Beyond a slight leakage from the stomach, there was nothing worthy of note.

On May 2, under ether, a small gum-elastic bougie was introduced into the œsophagus from below and shortly afterwards it passed upward into the mouth. A long piece of stout braided silk was tied to the lower end of the bougie, the bougie drawn out through the mouth, and the silk thus carried from the stomach to the mouth. A larger bougie was passed along the string from the stomach and crowded into the stricture; the silk string, steadied by a finger passed into the pharynx and stomach, was drawn up and down several times, after which the bougie passed the stricture with ease. These manipulations were repeated with larger bougies until a No. 26 French bougie passed with ease in both directions. Upper two-thirds of stomach wound closed by Lembert's sutures, also a like amount of the abdominal wound, stomach united to skin, small tube left in, also the string. On day following operation feeding was commenced by mouth and tube alternately, and the child did perfectly well. On May 5, 26, and 28, French bougie passed to stomach with ease. May 10, gastrotomy wound closed with sutures, and from this date all food was given by mouth. Liquid diet at first, in a few days soft solids were added, on May 23, solid food was allowed. Bougies were passed every three days, and by the middle of June, No. 32 French bougie passed with ease to the stomach. The child gained flesh and strength, swallowed solids without difficulty, and in July went to the country in excellent condition. No. 32 French bougie passes readily, and as the child grows older larger-sized instruments will be used. An interesting point concerning the case was the inability to pass the stricture from below at the time of the first operation. Instead of proceeding immediately to external œsophagotomy he decided to give the œsophagus an entire rest for a few days by feeding through the tube in the stomach and also per rectum. His opinion was that by so doing the spasmodic condition and irritability about the stricture would disappear, thereby allowing a fine instrument to be passed from below. The result fully justified this opinion, and the additional advantage of avoiding an

external œsophagotomy was gained. The leakage of food from the stomach was of small amount, and for future cases could be completely controlled by the rubber tube fitted with a double bulb.

DR. F. KAMMERER said that in a case of stricture of the œsophagus in a boy of six years, in the German Hospital, Dr. Gerster had opened the stomach and divided the stricture according to Dr. Abbe's method. Later on the stomach was closed. A bougie of fair size was introduced from the mouth every day, at first in narcosis, then without the same. For some reason, however, the stricture again contracted and Dr. Meyer was compelled to re-open the stomach to nourish the patient. Owing to the difficulties encountered at this second gastrostomy, the latter was unsatisfactory, in so far as leakage was marked, and the assimilation of food on this account insufficient. After the patient came under Dr. Kammerer's care he tried conscientiously, from fifteen to thirty minutes at times, to pass a sound through the œsophagus, both from the stomach and from the mouth, the patient being under narcosis, but did not succeed. Finally, the patient's condition having become very low, he resorted to œsophagotomy, which proved a very simple task in the emaciated condition of the patient, and very soon succeeded in passing a tube on into the stomach. The patient, however, died that night. He very much regretted not having done œsophagotomy at an earlier date. The case certainly shows that strictures, which cannot be passed from stomach or mouth, are occasionally amenable to this form of treatment from an incision in the œsophagus. In his case the stricture was situated only a few inches below the point of incision, and it can be readily understood how the opening into it was more easily found at so short a distance and in a straight direction.

DR. ABBE stated that the two cases of stricture of the œsophagus which he showed last year, one a woman and the other a child, three years of age, treated by dividing the stricture with a string, are still perfectly well and the patients are able to eat everything. The bougie has not been passed in the case of the child for several months. The woman introduces the largest size occasionally. There has been no tendency to contraction.

DR. FRED. LANGE referred to the last case of impermeable stricture of the œsophagus which had come under his observation, and in which he was able only after repeated attempts to pass the finest filiform bougie. He added that, owing to the spasmodic condition which was often present in the muscles, such attempts should always

be made under narcosis. Then with the aid of an instrument with a number of blades screwed on a steel staff, very similar to one used in cases of urethral stricture, he was able to make a number of divisions of the constricted tissue, and within three or four weeks dilated up to No. 30 French. The child could then swallow everything.

OPERATIVE PROCEDURES IN CONGENITAL AND TRAUMATIC DISLOCATIONS OF THE HIP IN CHILDREN.

DR. V. P. GIBNEY read a paper with the above title (see page 621), and presented a number of patients in illustration of the subject, stating that he presented them because he was anxious to elicit discussion in the treatment of congenital dislocation of the hip.

Hoffa's operation does not seem to have gained much ground in this country. In Boston they have had about the same experience with it as in New York,—a good many relapses. Curiously enough, the two cases operated upon in this country by Hoffa himself have relapsed. One was in a child two years old, which is said to be the typical age for the operation.

The operation itself is a difficult one, chiefly because of the manual force required, and the injury to the tissues likely to result therefrom in putting the head of the femur in its new place.

The opinion has been entertained that these cases of congenital dislocation of the hip never or rarely develop pain. A number of cases which have come under observation at the Hospital for the Ruptured and Crippled have developed pain sooner or later, and in one the pain was most acute, and was treated by traction a long time, in order to relieve it. Finally he was operated upon for the relief of that one symptom. He has now a lady under observation, thirty-two years of age, who was without pain until a year ago, when, for some reason unknown to her, pain developed in the hip.

He doubted very much whether operative treatment would prove of much benefit in double hip-dislocation. Without it the patients learn to balance themselves quite well, and walk comfortably with a swinging gait. Before pain developed, in the case of the lady just referred to, she was an excellent dancer.

DR. L. A. STIMSON asked whether these cases represented the average results of the operation, and being answered by Dr. Gibney

that, as far as he was informed, they did, said, in that case it seemed to him that practically the only result is to create a stiff joint, to attach the femur immovably to the ileum, and that, in two of the three cases this had been done in a relatively disadvantageous position,—flexion and adduction. Such a result did not seem to him to justify so serious an operation; and if that is all that is to be expected from it he should think it advisable to restrict interference to cases in which the functional disability is great, and to seek to obtain the fixation by simpler measures.

DR. ABBE queried whether a corset could not be so adapted as to enable some of these patients to walk who were unable to do so without a certain amount of fixation. He recalled a case of double congenital hip-dislocation treated satisfactorily in that manner, which was presented at the Congress in Berlin four years ago.

DR. GIBNEY replied that he had seen corsets which came down a distance over the pelvis, and were fixed by perineal straps, resulting in a certain amount of benefit. Some had been put on with a view to crowd the head of the femur down towards the acetabulum, and form a new socket. Hoffa himself used one of some form in convalescent cases after operation, but Dr. Gibney was of opinion that some atrophy of muscles must result and make it necessary to continue the support.

TWO CASES OF SUCCESSFUL SPLENECTOMY.

DR. FRANCIS MARKOE [1] presented two patients who had been subjected by him to operation for removal of enlarged spleen. The histories of the cases are as follows:

CASE I. *Hypertrophied Spleen.*—D. B., a Russian, aged fourteen, had been admitted to St. Luke's Hospital on January 18, 1893, with the following history: He had suffered from acute malarial poisoning in 1891, for which he had been treated at Mount Sinai Hospital, and discharged cured. Later on recurrent attacks of intermittent fever, and evidences of chronic malaria. During the acute attacks the liver had been enlarged, but there had been no noticeable enlargement of the spleen until September, 1892, when it began to increase in size and give rise to constant pain.

When admitted, he complained only of enlarged and painful

[1] These cases, and those following, presented by Dr. Markoe, were presented at the meeting of the Surgical Society of February 14, 1894; having been omitted from the report of that meeting, already published, they are here inserted.

abdomen with progressive loss of flesh and strength. He had had no chills for some months; no fever and no pain in the bones. The spleen then occupied the entire hypochondriac and umbilical regions extending three fingers breadth below the umbilicus.

On February 24, 1893, examination of fresh blood by Dr. Southworth showed red cells somewhat pale, but of good size and shape, with well-formed and even rouleaux. Hæmoglobin 62 per cent. Red cells 4,032,000. White cells very rare, so that no proper estimate could be made. Staining showed same rarity of white cells, but those present to be normal. On October 28, 1893, he had been referred to the speaker by Dr. Beverly Robinson, with the statement that all medical methods of treatment had been faithfully tried without benefit, and that now respiration was becoming seriously interfered with.

Physical examination at this time gave the following result:

Thorax, negative. Abdomen,—liver enlarged, free border easily felt two and a half inches below costal arch. This enlargement, symmetrical, and extending well over to left side, where the outline was lost owing to pressure of spleen, whose sharp edge could be felt running from under the tip of sternum, vertically downward and backward with a convex curve, which extended beyond umbilicus towards the left, almost reaching Poupart's ligament.

No glandular enlargement elsewhere observed. Leukæmia and active malaria having been excluded, and medical measures having failed to check the progressive enlargement of the spleen which now threatened by mechanical pressure the life of the patient, surgical interference had been decided legitimate at a consultation of the hospital staff. Consent had been readily obtained from both the patient and his father, and on December 1, 1893, the speaker had removed the spleen, ably assisted by his colleague, Dr. B. F. Curtis. The operation had proved one of exceeding difficulty, owing to the presence of enormously dilated superficial and deep veins in the parietes, and the broadness of the pedicle rich with similarly dilated and thin-walled vessels.

A long median incision with one at right angles to its centre had permitted the delivery of the spleen. The broad and exceedingly vascular pedicle had then been tied off with locked ligatures supplemented by one of strong silk including the whole. No drainage had been employed, and the parietal wound was closed by sutures.

The reaction after the operation had been good, but twenty-four

hours later intense pulmonary congestion with œdema supervened, which for some time seriously menaced the life of the patient. Under the careful watching and direction of Dr. Robinson this had been finally overcome, and the further progress had been satisfactory. Primary union having occurred throughout the wound, except at the lowest of the lateral skin sutures, where a small stitch abscess occurred, probably infected at the time of the chest poulticing.

Examination of fresh blood just before operation showed,—

Red cells normal, good size, shape, and color. Resistance only moderate.

Red cells, 4,604,000 per cubic millimetre.

White cells, 3125 per cubic millimetre.

Hæmoglobin, 77 per cent.

Ehrlich stains.

Lymphocytes, 22 per cent.

Large mononuclear leucocytes, 6 per cent.

Transitional forms, 6 per cent.

Polynuclear leucocytes, 70 per cent.

Eosinophile cells, 2 per cent.

Summary: White cells reduced in number with normal relations in the proportions of the different forms of white cells.

Red cells fairly normal in number and structure.

Hæmoglobin somewhat reduced.

One month later examination of blood showed improvement of condition of red cells in number, color, and resistance.

White cells showed leucocytosis, while before they were below the normal.

Increase in eosinophile cells slightly beyond the normal limit.

The removed spleen weighed about four pounds.

The report of the pathologist, Dr. J. S. Thacher, was as follows:

"On cutting into the spleen it was found to be of firm consistence, dark in color, and abundantly sprinkled with minute, deeply-yellow spots, with red borders measuring 1.3 millimetres in diameter, and in shape round, triangular, Y-shaped, or irregular.

"On microscopical examination these spots were found to be hæmorrhages, having at their centres connective tissue with many large branching cells and some irregular hyaline masses, which were evidently altered blood-cells. The rest of the tissue showed distended cavernous veins and thickened reticular frame-work,—that is, the appearances of a chronic congestion of the organ."

Notwithstanding that at no time were malarial organisms found in the blood, the dependence of the hypertrophy upon the previous malarial poisoning seemed probable.

CASE II. *Displaced Hypertrophied Spleen.*—This patient had been operated upon by the speaker on August 10, 1892, for an enlarged spleen (five and a half pounds), which, displaced and firmly impacted in the pelvis, had given rise to distressing symptoms. She had been presented at a meeting of the Surgical Society on March 8, 1893, and the report of her case published in the ANNALS OF SURGERY, Vol. XVII, p. 582, 1893. The speaker now presented her to show that from the recovery from operation to the present date she had enjoyed perfect health, entirely free from all discomfort. The following report from Dr. Southworth, who had quite recently examined her blood, might prove interesting (February 13, 1894):

"Hæmoglobin, 78 per cent.; red cells, 4,672,000 per cubic millimetre; white cells, 12,500. Fresh specimen: Red cells of excellent size, shape, and color. Resistance fair. Rouleaux formation good. Most of the white cells seen are small. Ehrlich stains: —Lymphocytes (small mononuclear), 49 per cent.; large mononuclear, 5 per cent.; transition forms, 0 per cent.; polynuclear, 46 per cent.; eosinophile, 0 per cent. This unusual percentage of mononuclear cells (54 per cent.) is very interesting. The increase of the lymphocytes from the normal, 25 per cent., to 49 per cent. suggests a vicarious action on the part of the lymph-nodes, whose product they are supposed to be. The total number of white cells is somewhat increased, but it has no significance unless constant."

PYLOROPLASTY FOR CICATRICIAL STENOSIS.

DR. MARKOE also presented a man, aged forty-nine years, who had been subjected to pyloroplasty. His history was as follows: He had been admitted to the medical service of St. Luke's Hospital on August 18, 1893. About a year previous he began to suffer from constipation and pain, most acute after the ingestion of certain kinds of food (meat, etc.), and located in lower epigastrium. In addition, he perceptibly lost flesh and strength, until seven months later he was obliged to give up work.

Physical examination proved negative, but the use of the stomach-tube showed marked stagnation of stomach contents and no free hydrochloric acid. The diagnosis of probable gastric carcinoma had been made. Systematic treatment including lavage and selected diet

had been adopted, but notwithstanding, vomiting began during the latter part of October, and as he steadily deteriorated, he had been transferred to the surgical service on November 8, 1893.

Examination again proved negative except for a vague sense of resistance over umbilicus. He had grown very feeble and emaciated, weighing but eighty-five pounds. On November 24, 1893, under ether, a median laparotomy had been performed. This had revealed a slightly-dilated stomach, which appeared normal in all respects save that the pyloric extremity seemed unusually firm and somewhat thickened. A small opening had then been made in the anterior wall of the stomach at the point selected for entero-anastomosis, should it prove indicated, and its interior explored. Here again nothing pathological had been detected until the pylorus had been reached. Its lumen had then been found so contracted as to admit nothing larger than a uterine sound.

Typical pyloroplasty had then been performed after the method of Heineke-Mikulicz.

The patient's recovery had been uneventful, and he had left the hospital on February 12, 1894, in perfect health, weighing 111 pounds (a gain of 26 pounds).

CHOLEDOCHO-LITHECTOMY.

DR. F. H. MARKOE presented a woman, aged forty-seven years, with the following history: She had suffered attacks of biliary colic for sixteen years, averaging about three a year. She had never been jaundiced until the attack before the last (about a year previous), the duration of which had been about three weeks. It had been very severe in character, and accompanied by chills and fever.

During the latter part of August, 1893, she had been again seized with pain associated with nausea, vomiting, and intense jaundice. Four weeks later she entered St. Luke's Hospital. Physical examination showed an enlarged liver, but no other organic lesions. The jaundice had been pronounced, and the resulting pruritus most distressing.

On September 29 he had opened the abdomen by a vertical incision through the right linea semilunaris. The gall-bladder had been found empty. After careful search a hard nodule had been discovered close to the junction of the ducts. An attempt had been made to reach this through the cystic duct, after opening the gall-bladder, but it could not be dislodged and brought within reach.

The parietal opening had then been still further enlarged by a transverse incision through the rectus muscle, and after separation of fairly firm adhesions, the obstruction had been located in the common duct. A longitudinal incision had then been made through the thickened walls of the duct, and a calculus the size of an ordinary marble removed. No other obstruction had been found. The openings in both duct and bladder had been sutured with fine silk, and the parietal wound closed except at one point where narrow wicks of iodoform gauze led down to the respective lines of visceral suture. All packing had been removed on the fifth day, and as the piece leading to the gall-bladder had been loosed, a free discharge of bile had taken place. By the end of a month the sinus had definitely closed, and the jaundice almost completely disappeared. She was now in perfect health, with a firm cicatrix.